(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 February 2001 (22.02.2001)

PCT

(10) International Publication Number
WO 01/12031 A1

(51) International Patent Classification[7]: A47G 19/22, B65D 47/18

(21) International Application Number: PCT/GB00/03055

(22) International Filing Date: 8 August 2000 (08.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9919133.0 14 August 1999 (14.08.1999) GB

(71) Applicant (for all designated States except US): ROYAL INDUSTRIES (THAILAND) PLC [TH/TH]; 126 Moo Sethakiji 1 Road, Omnoi, Krathumban, Samuthsakorn 74130 (TH).

(71) Applicant and
(72) Inventor: SAMSON, Ilan [IL/GB]; 8A Chesterford Gardens, London NW3 7DE (GB).

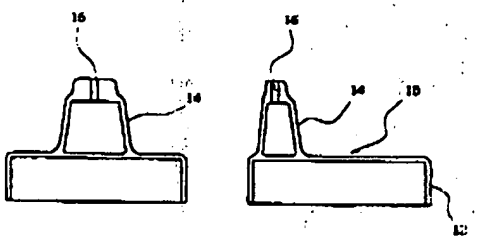
(74) Agent: WHARTON, Peter, Robert; Urquhart-Dykes & Lord, Tower House, Merrion Way, Leeds LS2 8PA (GB).

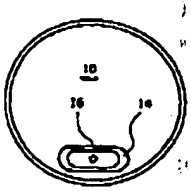
(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

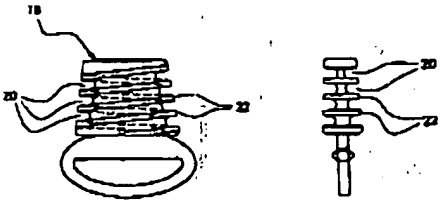
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

[Continued on next page]

(54) Title: SPILL-PROOF CUP







(57) Abstract: A cup is disclosed which includes: a sealingly engageable lid (10) having a drinking spout (14) located thereon, a tubular passage(20) formed between inner surface of the lid (10) and/or spout (14) and a detachable member (18) located on the lid (10), the passage (20) having one end in communication with the inside of the cup and the other end in communication with the outside of the spout (14) and being of such a diameter such that air cannot readilybubble past liquid inside it. When such a cup is inverted, the head of liquid inside lowers the pressure of the air above the liquid, and liquid therefore starts to move downwardly through the passage. This continues until the reduction in air pressure above the liquid just balances the pressure of the liquid head, when further movement of liquid ceases. (The fact that air cannot bubble past the liquid in the passage ensures that the air pressure is not restored while the cup is inverted or reclined). Thus the capacity of the passage should be great enough to contain this amount of liquid without reaching the exit and therefore spilling.

WO 01/12031 A1